

REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for the courtesies extended during the telephone interview and for the withdrawal of the finality of the previous action. In addition, Applicants wish to thank the Examiner for the notice that claim 23 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 23 stands rejected under 35 U.S.C. §112, 2nd paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. However, Applicants respectfully request withdrawal of this rejection since it is alleged that the term “discard circuit” does not appear in independent claim 14. However, Applicants respectfully wish to point the Examiner to lines 11 and 12 of claim 14 which states “including a discard circuit”. As such, it appears that this language was overlooked and that this rejection should be withdrawn.

Claims 1-2, 14-22 and 24-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Duluk, Jr. et al. in view of Lentz et al. As to claim 1, for example, the method requires, among other things, “generating region bits representing the location of the sorted vertex data with respect to a current tile being rendered” and “generating coordinate data representing an initial rasterization starting point estimate that is within the current tile when the region bits indicate that at least one of the sorted vertex data lies within the current tile being rendered and discarding the sorted vertex data of primitives that lie outside the boundary of the current tile being rendered”. As such, both region bits and coordinate data that represents an “estimate” of an initial rasterization starting point are generated. The estimate is based on region bits with respect to a current tile being rendered as required by the claim. Applicants are unable to find such suggestion or teaching in the cited references,

either alone or in combination. In the “Response to Amendment/Argument” section of the office action, it is stated that the Patent Office recognized that Duluk does not teach generating coordinate data representing an initial rasterization starting point estimate that is within the current tile when one of the sorted vertex data lies within the current tile but that this is necessarily required for displaying clipped images in a rasterization process. However, it does not mention where the reference teaches the claimed “region bits”. Also, Applicants respectfully challenge the position in the office action as there does not appear to be any teaching or suggestion of generating the claimed coordinate data that represents an initial rasterization starting point estimate based on region bits representing the location of the sorted vertex data with respect to a current tile being rendered as claimed. The cited portion of Duluk describes descriptors that are used for clipping of primitives on the top and bottom edges of tiles and does not describe or suggest, among other differences, generation of region bits or the generation of coordinate data that represents an initial rasterization starting point estimate that is within the current tile. As Applicants’ previously noted, the starting point used by Duluk is a point that lies outside rather than within the tile (see Duluk at column 76, lines 34-36, 45-46, 50-51; FIG. 45). Moreover, as best understood, the combination of Duluk and Lentz would teach persevering rather than discarding a starting point outside the tile boundary (as taught in Duluk) which traversing the boundary box left to right as taught in Lentz. As such, the claims are believed to be in condition for allowance.

Applicants respectfully reassert the relevant remarks made with respect to the independent claims that include similar language.

In addition, Applicants respectfully submit that claim 17 is also in condition for allowance since it requires, among other things, “an intercept calculation circuit operative to generate the initial rasterization starting point when the x-coordinate position data or the y-coordinate position data intercepts the boundary defined by the region bits.” The office

action cites to Duluk, namely column 34, lines 11-56; column 77, line 44 – column 78, line 20; column 80 – column 82, line 67; and column 115, line 53 and beyond. However, Applicants are unable to find mention of an intercept calculator that generates the initial rasterization starting point based on an interception of a boundary defined by region bits. To the contrary, the cited portions appear to teach determining boundary of tiles, not boundaries with respect to region bits as claimed. As stated for example on page 8 of Applicants' Specification, region bits may represent the position of sorted vertices with respect to a tile. Such an intercept calculation circuit and interception of boundaries that are defined by region bits are not taught or suggested by the cited references. Accordingly, this claim is also in condition for allowance.

With respect to new claim 43, Applicants respectfully reassert the relevant remarks made above with respect to claim 17 and as such, this claim is also believed to be in condition for allowance.

The dependent claims add additional novel and non-obvious subject matter and are also believed to be allowable as depending from allowable base claims.

Claims 41 and 42 have been rejected based on the rejection of claim 1 and as such, Applicants respectfully reassert the relevant remarks made above and as such, these claims are also believed to be in condition for allowance.

Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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